

ABSTRACT

A modulation light source capable of maintaining thermal stability of a gain part is provided. A modulation light source includes a DBR laser having a DBR part, a phase part and a gain part, a light wavelength conversion device that receives a fundamental wave from the DBR laser and from which an SHG light is emitted, and a control means for controlling the DBR laser. A substantially constant current is supplied to the gain part for a modulation time period of a PWM signal. At least one of the DBR part and the phase part is controlled for modulation using a current based on the PWM signal.